

SEP 14 200

TECH CENTER 1800/2900

Approved for use through 10/31/2002. OMB 0651-003

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
to a collection of information unless it displays a valid OMB control number

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Substitute for form 1449A/PTO**

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

<b>Application Number</b>	09/833,222
<b>Filing Date</b>	April 11, 2001
<b>First Named Inventor</b>	QIN
<b>Group Art Unit</b>	
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	ORT-1414

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature	<i>John H. Chasen</i>	Date Considered	11-16-95
-----------------------	-----------------------	--------------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231.

**DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

RECEIVED

SEP 14 2001

TECH CENTER 1600/2800

PTO/SB/08A (08-08)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

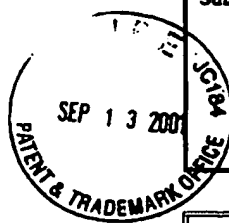
Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)  
Sheet 2 of 3

Application Number	09/833,222
Filing Date	April 11, 2001
First Named Inventor	QIN
Group Art Unit	
Examiner Name	
Attorney Docket Number	ORT-1414



RECEIVED  
TECH CENTER 1600/2800  
DEC 6 2001

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner's Initials <sup>2</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
SAS	2	BEAN et al., 1989. Classes of Calcium Channels in Vertebrate Cells. Annu. Rev. Physiol. 51:367-84
	3	BERTOLINO et al., 1992. The Central Role of Voltage-Activated and Receptor-Operated Calcium Channels in Neuronal Cells. Annu. Rev. Pharmacol. Toxicol. 32:399-421
	4	BIRNBAUMER et al., 1998. Structures and Functions of Calcium Channel $\beta$ Subunits. Journal of Bioenergetics and Biomembranes. Vol. 30(4): 357-375
	5	CASTELLANO et al., 1993. Cloning and Expression of a Neuronal Calcium Channel $\beta$ Subunits. The Journal of Biological Chemistry. Vol. 268(17) Issue of June 15, pp. 12359-12366
	6	CASTELLANO et al., 1993. Cloning and Expression of a Third Calcium Channel $\beta$ Subunits. The Journal of Biological Chemistry. Vol. 268(5) Issue of February 15, pp. 3450-3455
	7	CATTERALL, 1988. Structure and Function of Voltage-Sensitive Ion Channels. Science, 242:50-61
	8	D'ANDREA et al., 1998. Characterization of Protease-activated Receptor-2 Immunoreactivity in Normal Human Tissues. The Journal of Histochemistry & Cytochemistry. 46(2):157-164
	9	ELLIS et al., 1988. Sequence and Expression of mRNAs Encoding the $\alpha_1$ and $\alpha_2$ Subunits of a DHP-Sensitive Calcium Channel. Science. 241:1661-1664
	10	ERTEL et al., 2000. Nomenclature of Voltage-Gated Calcium Channels. Neuron. 25:533-535
	11	FELEX et al., 1997. Dissection of Functional Domains of the Voltage-Dependent $Ca^{2+}$ Channel $\alpha_2\delta$ Subunit. The Journal of Neuroscience. 17(18):6884-6891
	12	GEE et al., 1996. The Novel Anticonvulsant Drug, Gabapentin (Neurontin), Binds to the $\alpha_2\delta$ Subunit of a Calcium Channel. 271(10), Issue of March 8, pp. 5768-5776
	13	GILAD et al., 1995. Identification of the alternative spliced form of the $\alpha_2\delta$ subunit of voltage sensitive $Ca^{2+}$ channels expressed in PC12 cells. Neuroscience Letters. 193:157-160
	14	GURNETT et al., 1996. Transmembrane auxiliary Subunits of Voltage-dependent Ion Channels. The Journal of Biological Chemistry. 271(45), Issue of November 8, pp. 27975-27978
	15	GURNETT et al., 1996. Dual Function of the Voltage-Dependent $Ca^{2+}$ Channel $\alpha_2\delta$ Subunit in Current Stimulation and Subunit Interaction. Neuron. 16:431-440
SAS	16	HESS, 1990. Calcium Channels in Vertebrate Cells. Annu. Rev. Neurosci. 13:357-56
	17	MOSBY et al., L-Type Calcium Channels in Cardiac and Skeletal Muscle Purification and Phosphorylation. Annu. New York Academy of Sciences, pp. 27-38
SAS	18	HUI et al., 1991. Molecular Cloning of Multiple Subtypes of a Novel Rat Brain Isoform of the $\alpha_1$ Subunit of the Voltage-Dependent Calcium Channel. Neuron. 7:35-44
	19	JAY et al., 1990. Primary Structure of the $\gamma$ Subunit of the DHP-Sensitive Calcium Channel from Skeletal Muscle. Science. 248:490-492
	20	KLUGBAUER et al., 1999. Molecular Diversity of the Calcium Channel $\alpha_2\delta$ Subunit. The Journal of Neuroscience. 19(2):684-691
	21	KOZAK, 1991. An analysis of Vertebrate mRNA Sequences: Intimations of Translational Control. The Journal of Cell Biology. 115(4):887-903
	22	LACERAD et al., 1991. Normalization of current kinetics by interaction between the $\alpha_1$ and $\beta$ subunits of the skeletal muscle dihydropyridine-sensitive $Ca^{2+}$ channel. Nature. 352:527-530
	23	LEE et al., 1999. Cloning and Expression of a Novel Member of the Low Voltage-Activated T-Type Calcium Channel Family. The Journal of Neuroscience. 19(6):1912-1921
	24	LITTLETON et al., 2000. Ion Channels and Synaptic Organization: Analysis of the Drosophila Genome. Neuron. 26:35-43
	25	MIKAMI et al., 1989. Primary structure and functional expression of the cardiac dihydropyridine-sensitive calcium channel. Nature. 340:230-233
	26	MORI et al., 1991. Primary structure and functional expression from complementary DNA of a brain calcium channel. Nature. 350:398-402
	27	PEREZ-REYES et al., 1989. Induction of calcium currents by the expression of the $\alpha_1$ -subunit of the dihydropyridine receptor from skeletal muscle. Nature. 340:233-236
SAS	28	PEREZ-REYES et al., 1992. Cloning and Expression of a Cardiac/Brain $\beta$ Subunit of the L-type Calcium Channel. The Journal of Biological Chemistry. 267(3) Issue of January 25, pp. 1792-1797

APR 25 2002

RECEIVED

Examiner Signature	<i>[Signature]</i>	Date Considered	11-16-05
--------------------	--------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231.

**DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.